

FIG. 1

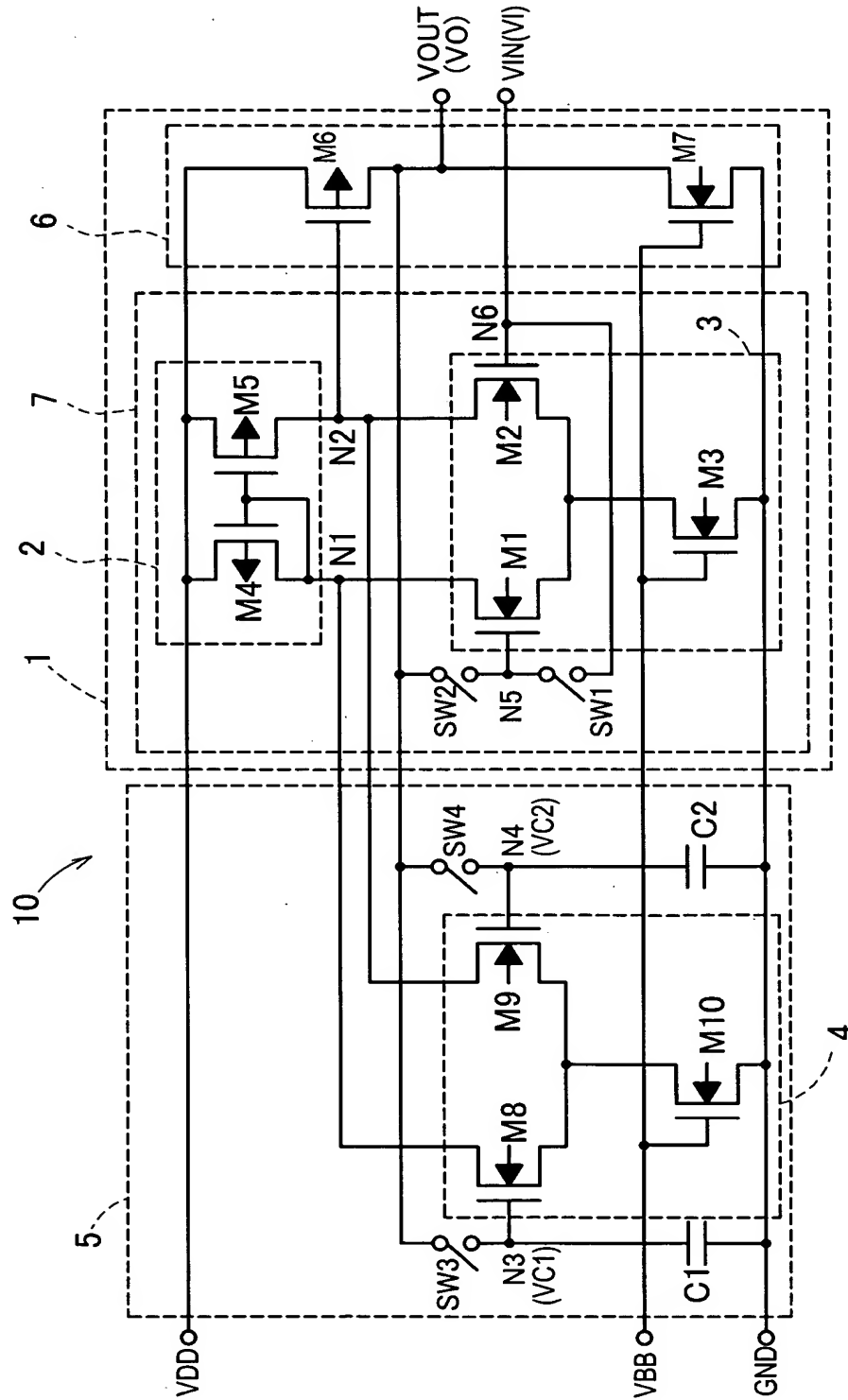


FIG.3
 CIRCUIT DIAGRAM OF OPERATIONAL AMPLIFIER DIRECTED
 TO SECOND EXAMPLE OF FIRST EMBODIMENT

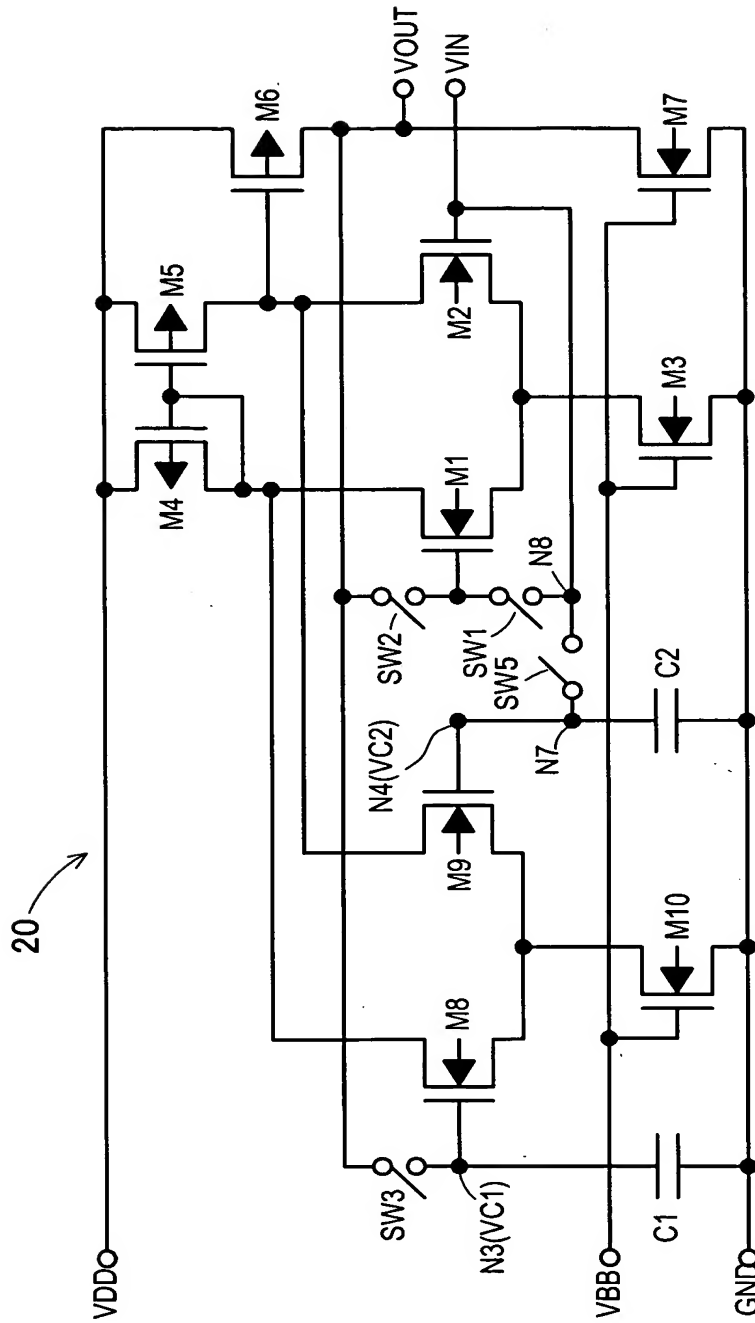


FIG.4

SCHEMATIC DIAGRAM OF CIRCUIT BLOCK DIRECTED TO SECOND EMBODIMENT

35

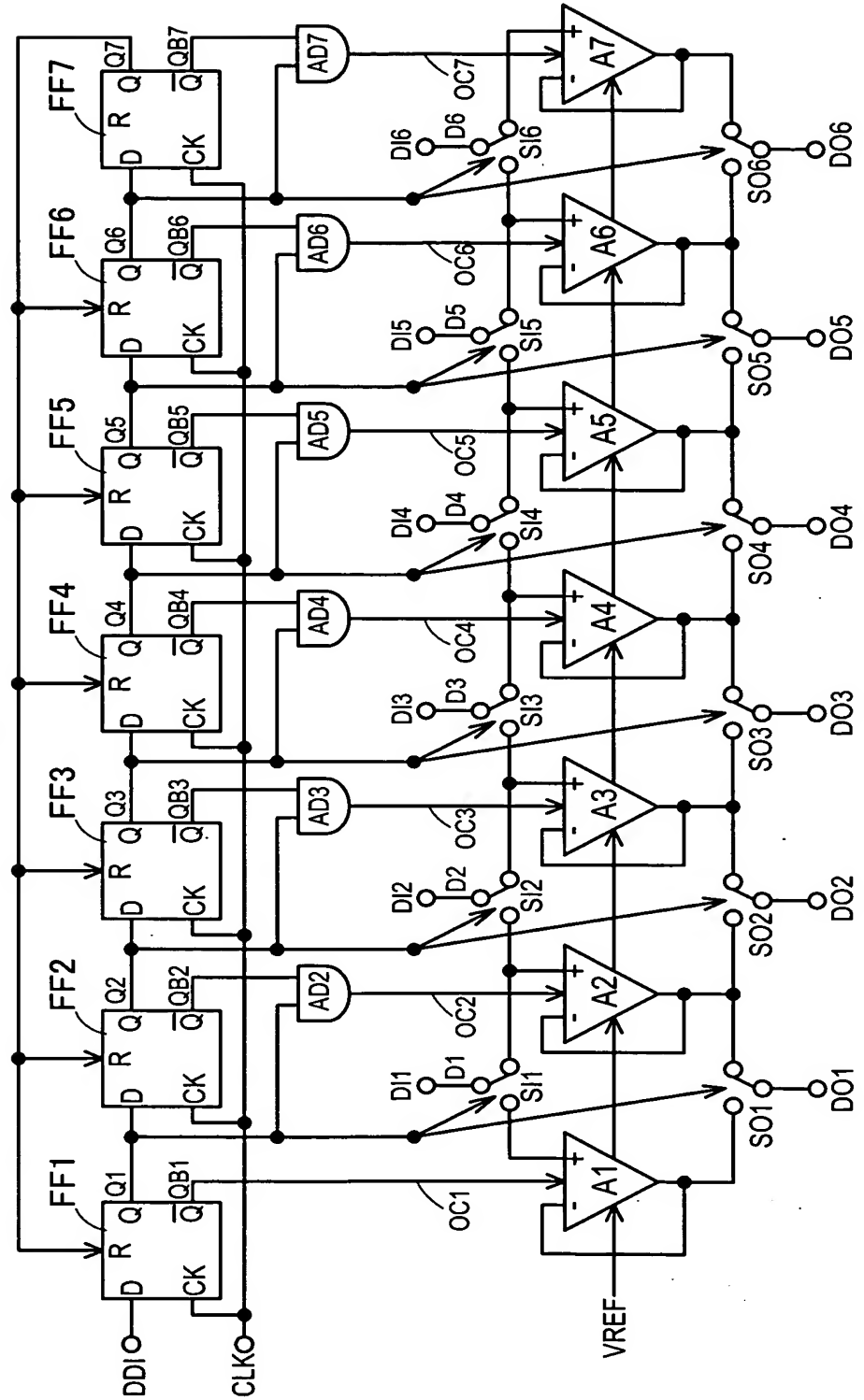


FIG.5

TIMING CHART OF CIRCUIT BLOCK DIRECTED TO SECOND EMBODIMENT

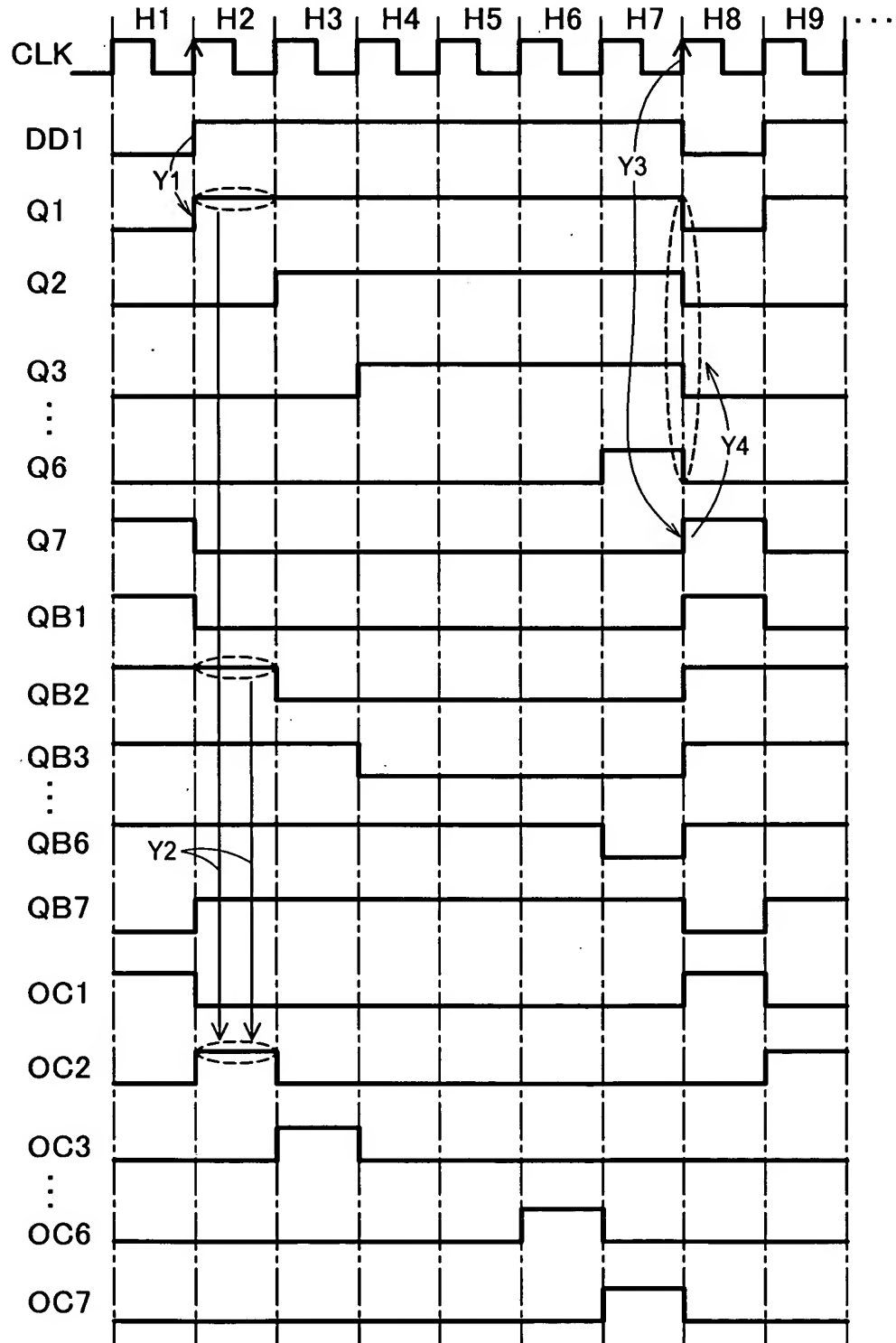


FIG.6

SWITCH OPERATION TABLE (1) OF OPERATIONAL AMPLIFIER DIRECTED TO SECOND EMBODIMENT

OPERATIONAL AMPLIFIER

| | A1 | A2 | A3 | A4 | A5 | A6 | A7 |
|----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| H1 | OFFSET CANCEL | D1 | D2 | D3 | D4 | D5 | D6 |
| H2 | D1 | OFFSET CANCEL | D2 | D3 | D4 | D5 | D6 |
| H3 | D1 | D2 | OFFSET CANCEL | D3 | D4 | D5 | D6 |
| H4 | D1 | D2 | D3 | OFFSET CANCEL | D4 | D5 | D6 |
| H5 | D1 | D2 | D3 | D4 | OFFSET CANCEL | D5 | D6 |
| H6 | D1 | D2 | D3 | D4 | D5 | OFFSET CANCEL | D6 |
| H7 | D1 | D2 | D3 | D4 | D5 | D6 | OFFSET CANCEL |
| H8 | OFFSET CANCEL | D1 | D2 | D3 | D4 | D5 | D6 |
| H9 | D1 | OFFSET CANCEL | D2 | D3 | D4 | D5 | D6 |
| ∴ | ∴ | ∴ | ∴ | ∴ | ∴ | ∴ | ∴ |

ONE HORIZONTAL
PERIOD

10a

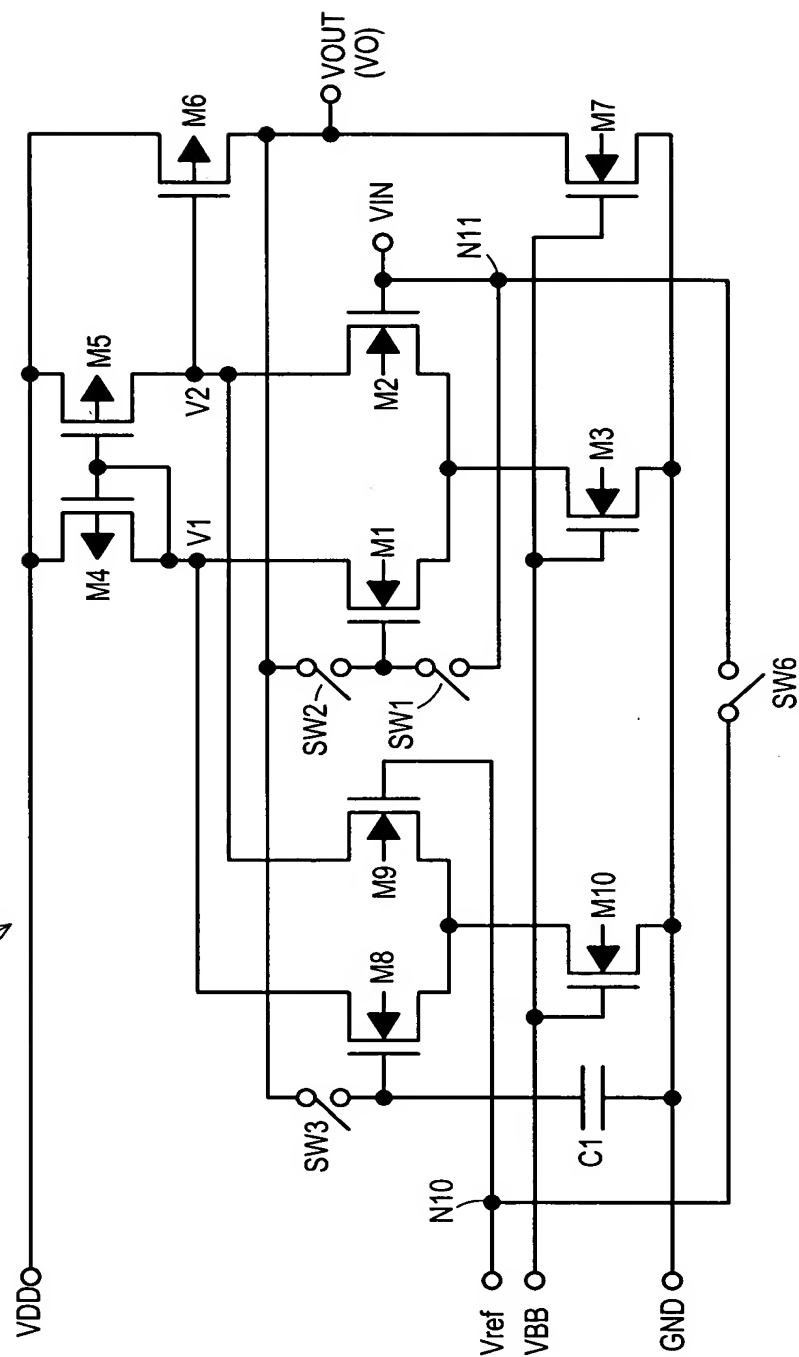
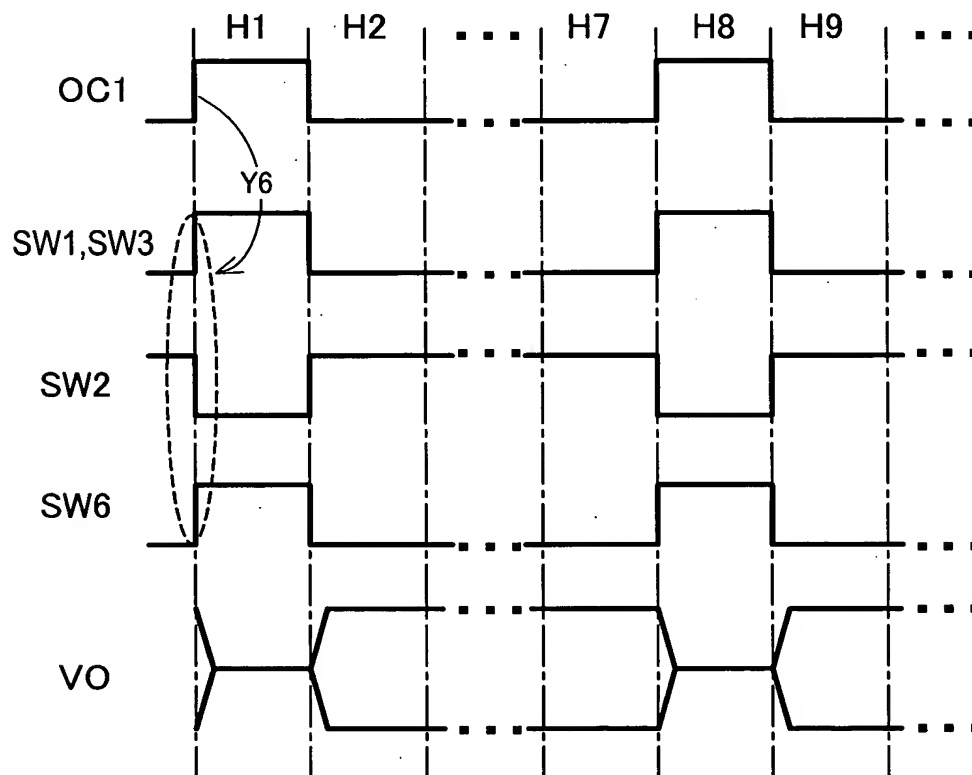


FIG.8

TIMING CHART OF OPERATIONAL AMPLIFIER DIRECTED
TO SECOND EMBODIMENT



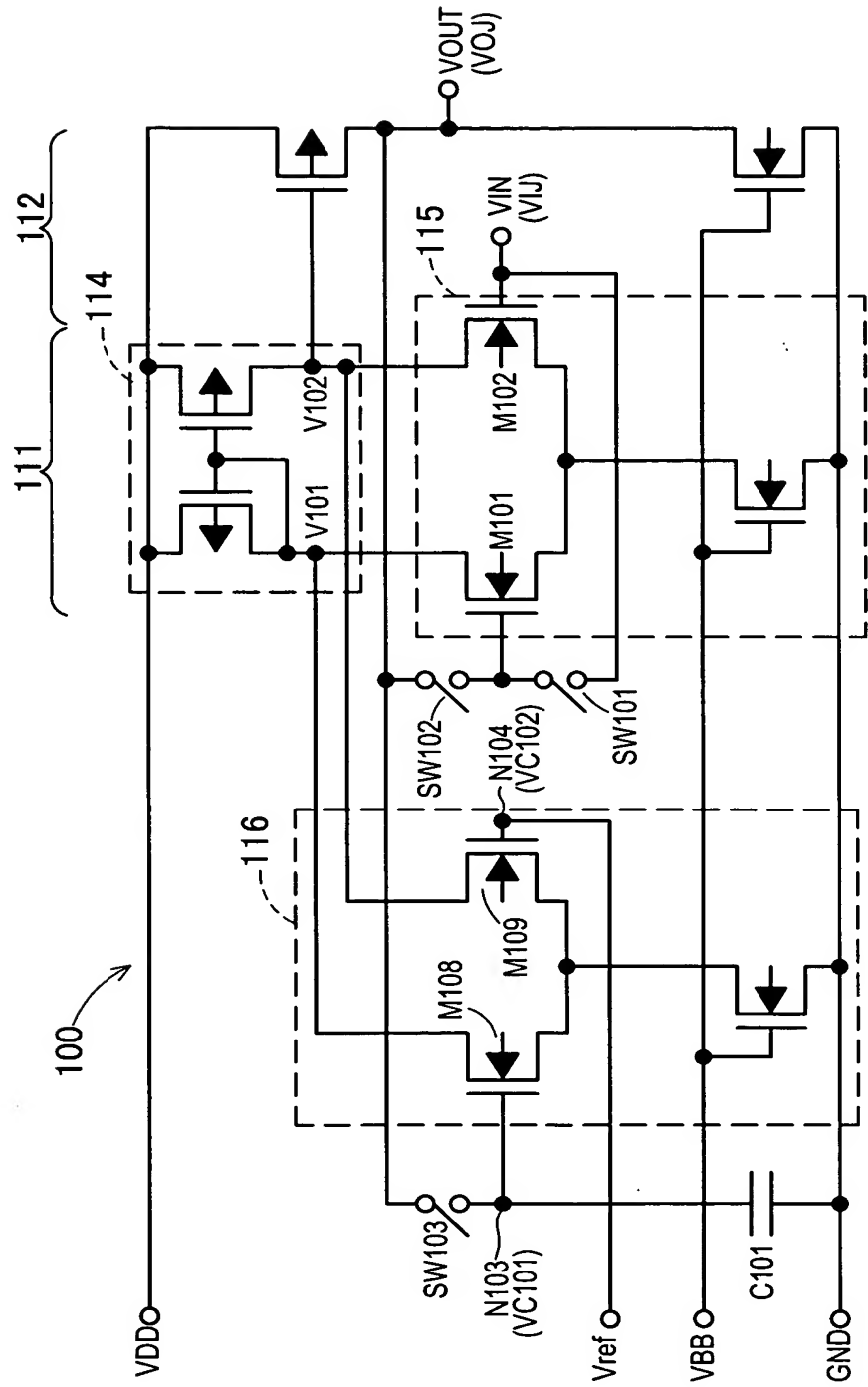
SWITCH OPERATION TABLE (2) OF OPERATIONAL AMPLIFIER
DIRECTED TO SECOND EMBODIMENT

| OPERATIONAL AMPLIFIER | | | | | | | |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | A1 | A2 | A3 | A4 | A5 | A6 | A7 |
| H1 | OFFSET CANCEL | D1 | D2 | D3 | D4 | D5 | D6 |
| H2 | D1 | OFFSET CANCEL | D2 | D3 | D4 | D5 | D6 |
| H3 | D1 | D2 | OFFSET CANCEL | D3 | D4 | D5 | D6 |
| H4 | D1 | D2 | D3 | OFFSET CANCEL | D4 | D5 | D6 |
| H5 | D1 | D2 | D3 | D4 | OFFSET CANCEL | D5 | D6 |
| H6 | D1 | D2 | D3 | D4 | D5 | OFFSET CANCEL | D6 |
| H7 | D1 | D2 | D3 | D4 | D5 | D6 | OFFSET CANCEL |
| H8 | D1 | D2 | D3 | D4 | D5 | OFFSET CANCEL | D6 |
| H9 | D1 | D2 | D3 | D4 | OFFSET CANCEL | D5 | D6 |
| H10 | D1 | D2 | D3 | OFFSET CANCEL | D4 | D5 | D6 |
| H11 | D1 | D2 | OFFSET CANCEL | D3 | D4 | D5 | D6 |
| H12 | D1 | OFFSET CANCEL | D2 | D3 | D4 | D5 | D6 |
| H13 | OFFSET CANCEL | D1 | D2 | D3 | D4 | D5 | D6 |
| H14 | D1 | OFFSET CANCEL | D2 | D3 | D4 | D5 | D6 |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |

ONE HORIZONTAL PERIOD

FIG.10 PRIOR ART

CIRCUIT DIAGRAM OF OPERATIONAL AMPLIFIER EQUIPPED WITH
CONVENTIONAL OFFSET CANCEL FUNCTION



11/13

FIG.11 PRIOR ART

TIMING CHART OF OPERATIONAL AMPLIFIER EQUIPPED WITH CONVENTIONAL OFFSET CANCEL FUNCTION

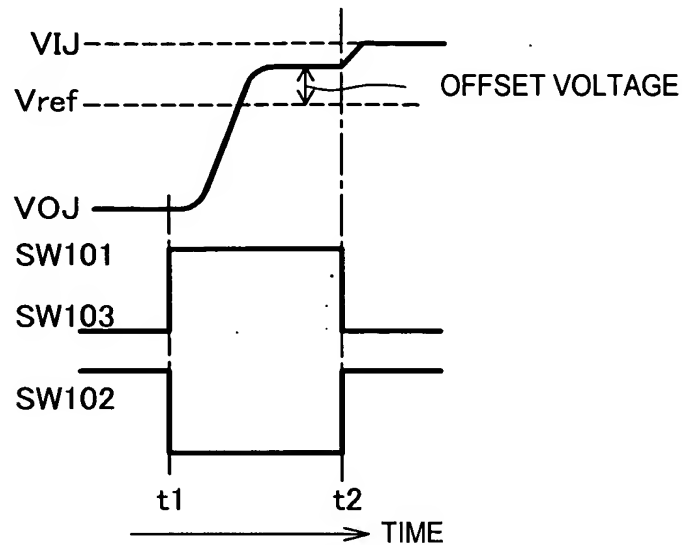


FIG.12

SCHEMATIC STRUCTURE OF LIQUID CRYSTAL DISPLAY DEVICE

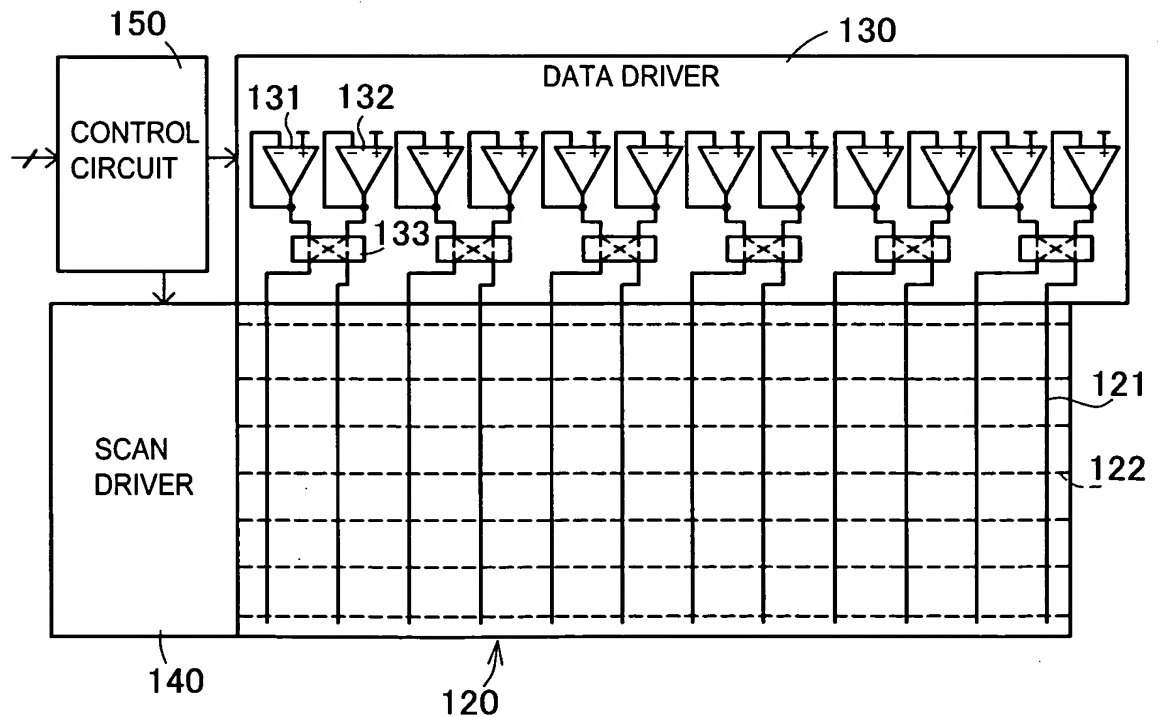


FIG.13 PRIOR ART

DIAGRAM SHOWING STRUCTURE OF CONVENTIONAL LINE DRIVER

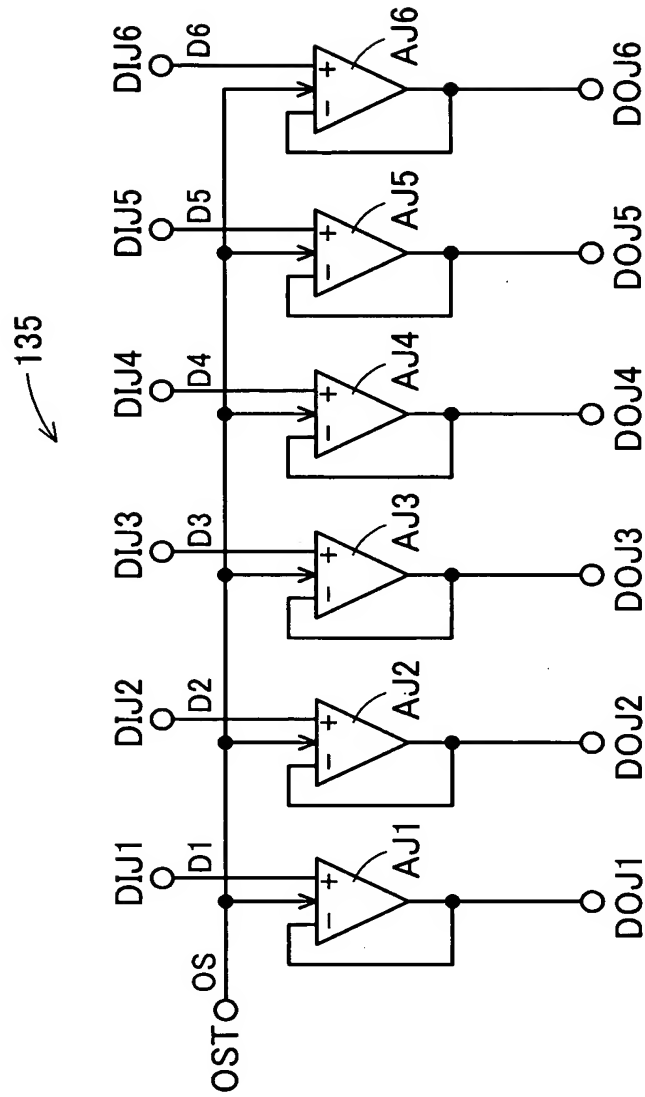


FIG.14 PRIOR ART

TIMING CHART ACCOUNTING FOR OPERATION OF
CONVENTIONAL LINE DRIVER

